AMENDMENTS TO THE CLAIMS

44. (Currently Amended) An apparatus, comprising:

a network interface;

a peripheral interface; and

a processor coupled to the network interface and the peripheral interface, the processor being associated with a first simulation of a virtual environment including a first virtual object, the processor configured to receive from the network interface a signal associated with a second virtual object within the virtual environment, the second virtual object generated by a remote processor, the processor configured to send to the peripheral interface a signal associated with a haptic feedback based on a virtual interaction between the first virtual object and the second virtual object.

45. (Previously Presented) The apparatus of claim 44, wherein:

the processor is configured to receive from the peripheral interface a signal associated with a position of a manipulandum, the processor is configured to send to the network interface a signal associated with the first virtual object based on the position of the manipulandum.

46. (Previously Presented) The apparatus of claim 44, the processor being a first processor, wherein the signal associated with the haptic feedback is configured to compensate within the first simulation for a delay between signals associated with the first virtual object and the signal associated with the second virtual object.

47. (Previously Presented) The apparatus of claim 44, the processor being a first processor, wherein:

the virtual environment is defined by the first processor and a second processor in communication with the first processor over a network, the first processor defining the first simulation of the virtual environment, the second processor defining a second simulation of the virtual environment, the first simulation substantially corresponding to the second simulation.

48. (Previously Presented) The apparatus of claim 44, the processor being a first processor, the signal associated with the haptic feedback being a first signal, the apparatus further comprising:

a manipulandum;

an actuator coupled to the manipulandum; and

a second processor coupled to the actuator and the peripheral interface, the second processor configured to receive the first signal from the peripheral interface, the second processor configured to send a second signal to the actuator based on the first signal, the actuator configured to provide haptic feedback based on the second signal.

49. (Previously Presented) The apparatus of claim 44, the processor being a first processor, the apparatus further comprising:

a manipulandum having at least one degree of freedom;

an actuator coupled to the manipulandum;

a sensor configured to detect a position of the manipulandum in the at least one

degree of freedom; and

a second processor coupled to the sensor and the peripheral interface, the second processor configured to send a position signal to the peripheral interface based on the position of the manipulandum,

the first processor configured to send to the network interface a signal associated with the first virtual object based on the position signal.

50. (Previously Presented) The apparatus of claim 44, wherein:

the network interface, the peripheral interface and the processor are included within a video game console system, the first simulation and the second simulation being associated with a virtual game environment; and

the network interface being at least one of an Ethernet connection and a modem connection.

51. (Previously Presented) The apparatus of claim 44, wherein: the signal associated with the haptic feedback includes a high-level command, the high-level command configured to be interpreted by a local processor to implement a local force routine with a manipulandum.

52. (Previously Presented) The apparatus of claim 44, wherein:

the signal associated with the haptic feedback includes a positional offset, the positional offset being associated with a difference between the first virtual object and the second virtual object within the first simulation.

53. (Currently Amended) An apparatus, comprising:

a manipulandum having at least one degree of freedom;

an actuator coupled to the manipulandum;

a sensor configured to detect a position of the manipulandum in the at least one degree of freedom, the position of the manipulandum being associated with a first virtual object within a virtual environment; and

a local processor coupled to the actuator and the sensor, the local processor configured to receive from a host processor a signal associated with a virtual interaction between the first virtual object and a second virtual object within the virtual environment, the second virtual object generated by a remote processor, the local processor configured to send a signal to the actuator based on the signal from the host processor, the virtual environment being defined by the host processor and the ~~a~~ remote processor in communication with the host processor over a network.

54. (Previously Presented) The apparatus of claim 53, wherein:

the local processor is configured to receive from the sensor a signal associated with a position of a manipulandum, the position of the manipulandum being associated with a position of the first virtual object within the virtual environment.

55. (Previously Presented) The apparatus of claim 53, wherein:

the host processor is associated with a first simulation of the virtual environment;

the remote processor is associated with a second simulation of the virtual environment; and

the signal sent to the actuator is configured to compensate within the first simulation for a delay between signals associated with the first virtual object and the signal associated with the second virtual object.

56. (Previously Presented) The apparatus of claim 53, wherein:

the virtual environment is defined by the host processor and the remote processor, the first processor defining the first simulation of the virtual environment, the second processor defining a second simulation of the virtual environment, the first simulation substantially corresponding to the second simulation.

57. (Previously Presented) The apparatus of claim 53, wherein:

the signal from the host processor includes a high-level command, the local processor configured to implement a local force routine based on the high-level command, the signal sent to the actuator being based on the local force routine.

58. (Previously Presented) The apparatus of claim 53, wherein:

the host processor is associated with a first simulation of the virtual environment;

the remote processor is associated with a second simulation of the virtual environment; and

the signal from the host processor includes a positional offset, the positional offset being associated with a difference between the first virtual object and the second virtual object within the first simulation.

59. (Currently Amended) A method, comprising:

providing a manipulandum having at least one degree of freedom;

providing an actuator coupled to the manipulandum;

providing a sensor configured to detect a position of the manipulandum in the at least one degree of freedom, the position of the manipulandum being associated with a first virtual object within a virtual environment; and

providing a local processor coupled to the actuator and the sensor, the local processor configured to receive from a host processor a signal associated with a virtual interaction between the first virtual object and a second virtual object within the virtual environment, the second virtual object generated by a remote processor, the local processor configured to send a signal to the actuator based on the signal from the host processor, the virtual environment being defined by the host processor and the ~~a~~ remote processor in communication with the host processor over a network.

60. (Previously Presented) The method of claim 59, wherein:

the local processor is configured to receive from the sensor a signal associated with a position of a manipulandum, the position of the manipulandum being associated with a position of the first virtual object within the virtual environment.

61. (Previously Presented) The method of claim 59, wherein:

the host processor is associated with a first simulation of the virtual environment;

the remote processor is associated with a second simulation of the virtual environment; and

the signal sent to the actuator is configured to compensate within the first simulation for a delay between signals associated with the first virtual object and the signal associated with the second virtual object.

62. (Previously Presented) The method of claim 59, wherein:

the virtual environment is defined by the host processor and the remote processor, the first processor defining the first simulation of the virtual environment, the second processor defining a second simulation of the virtual environment, the first simulation substantially corresponding to the second simulation.

63. (Previously Presented) The method of claim 59, wherein:

the signal from the host processor includes a high-level command, the local processor configured to implement a local force routine based on the high-level command, the signal sent to the actuator being based on the local force routine.

64. (Previously Presented) The method of claim 59, wherein:

the host processor is associated with a first simulation of the virtual environment;

the remote processor is associated with a second simulation of the virtual environment; and

the signal from the host processor includes a positional offset, the positional offset being associated with a difference between the first virtual object and the second virtual object within the first simulation.

65. (Currently Amended) A method, comprising:

enabling a first simulation of a virtual environment on a first processor and a second simulation of the virtual environment on a second processor, the first processor being in communication with a first haptic feedback device, the second processor being in communication with a second haptic feedback device, the second processor being remote to the first processor;

enabling the first processor to provide a first signal to the first ~~its~~ haptic feedback device based on an interaction between a first virtual object and a second virtual object within the first simulation, the interaction within the first simulation being based on a position signal from the first haptic feedback device ~~of the first processor~~ and a signal associated with the second virtual object from the second processor; and

enabling the second processor to provide a second signal to the second ~~its~~ haptic feedback device based on an interaction between the first virtual object and the second virtual object within the second simulation, the interaction within the second simulation being based on a position signal from the second haptic feedback device ~~of the second processor~~ and a signal associated with the first virtual object from the first processor.

66. (Previously Presented) The method of claim 65, further comprising:

enabling synchronization between the first simulation and the second simulation based, at least in part, on the signal to the haptic feedback device of the first processor and the signal to the haptic feedback device of the second processor.

67. (Previously Presented) The method of claim 65, wherein:

the first processor is a first video-gaming console, the haptic feedback device associated with the first processor is a first controller; and

the second processor is a second video-gaming console, the haptic feedback device associated with the second processor is a second controller.

68. (Previously Presented) The method of claim 67, wherein:

the first controller includes a manipulandum, the position signal from the first controller being based on a position of the manipulandum of first controller; and

the second controller includes a manipulandum, the position signal from the second controller being based on a position of the manipulandum of first controller.

69. (Currently Amended) A system, comprising:

a video-gaming console having

a network interface;

a peripheral interface; and

a host processor coupled to the network interface and the peripheral interface, the host processor being associated with a first simulation of a virtual environment including a first virtual object, the host processor configured to receive from the network interface a signal associated with a second virtual object within the virtual environment, the second virtual object generated by a remote processor, the host processor configured to send to the peripheral interface a signal associated with a haptic feedback based on a virtual interaction between the first virtual object and the second

virtual object; and

a controller having

a manipulandum having at least one degree of freedom;

an actuator coupled to the manipulandum;

a sensor configured to detect a position of the manipulandum in the at least one degree of freedom, the position of the manipulandum being associated with the first virtual object within the virtual environment; and

a local processor coupled to the actuator, the sensor and the peripheral interface of the video-gaming console, the local processor configured to receive the signal associated with the haptic feedback from the peripheral interface of the video-gaming console, the local processor configured to send a signal to the actuator based on the signal associated with the haptic feedback,

the actuator configured to provide haptic feedback to the manipulandum based on the signal from the local processor.